



VICKI V. QUIRAM
Commissioner

STATE of NEW HAMPSHIRE
DEPARTMENT of ADMINISTRATIVE SERVICES
DIVISION of PUBLIC WORKS - DESIGN & CONSTRUCTION
POB 483, 7 Hazen Drive – Room 250
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ADDENDUM NUMBER 01

FOR

BUILDING 8 RENOVATION AND BUILDING 1 FLOOR & WINDOWS

NEW HAMPSHIRE ROUTE 126

NEW HAMPSHIRE ARMY NATIONAL GUARD

ADJUTANT GENERAL'S DEPARTMENT

DIVISION OF PUBLIC WORKS PROJECT NUMBER 80835R

CONTRACT A

MARCH 24, 2016

DOCUMENT 00911

ADDENDUM NUMBER 01

TO: ALL CONTRACT BIDDERS OF RECORD

This Addendum forms a part of the Contract Documents and modifies the Bidding Documents dated March 10, 2016, with amendments and additions noted below.

Acknowledge receipt of this Addendum in the space provided in the Proposal Form. Failure to do so may disqualify the Bidder.

This Addendum consists of 25 pages.

BIDDER'S QUESTIONS

1. Q: Please provide a specification for the New Metal Wall Panel on Building No. 8.

A: See the attached specification section 074619 – Metal Siding.

2. Q: Are the lockers shown on A4.1 existing or do they need to be supplied? If supplied please clarify type, size, color.

A: The lockers shall be new. See the attached specification section 105113 – Metal Lockers.

3. Q: Please clarify type (color, thickness, manufacturer) of Insulated Metal panels shown at Detail 5/A0.4.

A: Insulated metal panel is existing.

4. Q: Is there any hazardous materials present in existing building? Has there been any hazardous material testing done? If yes, are the reports available?

A: See the attached report from RPF Associates.

5. Q: Rubber tile in room 120 is to be supplied by others, what type of installation is required for this tile, loose lay or glue down?

A: Loose lay.

6. Q: What type of floor prep is expected for beneath the rubber tile? The foundation wall and slab are not at the same elevation.

A: Clean concrete slab. Slight elevation changes are acceptable.

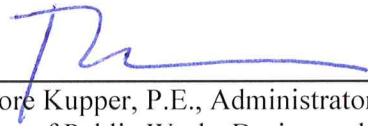
CHANGES TO THE SPECIFICATIONS

DIVISION 7 THERMAL AND MOISTURE PROTECTION

1. Add specification section 074619 – Steel Siding, to Division 7 in the Contract.

DIVISION 10 SPECIALTIES

2. Add specification section 105113 – Metal Lockers, to Division 10 in the Contract.



Theodore Kupper, P.E., Administrator
Division of Public Works Design and Construction

END OF DOCUMENT

August 25, 2015

Kenneth Coombs
State of NH, Dept. of Adjutant General
Architect/Project Manager
Construction Facility Management Office
1 Minuteman Way
Concord, NH 03301

Re: Asbestos Survey Findings
Center Strafford Facility, Building 8
RPF File 156801

Dear Mr. Coombs:

On July 31, 2015, RPF Environmental, Inc. (RPF) conducted a survey at Building 8 located at the Center Strafford Facility located on Parker Mountain Road in Strafford, NH. The survey was performed in the building for accessible asbestos containing building material (ACBM) as indicated herein. Below is a summary of findings, discussion of the results and preliminary recommendations for proper management of the identified hazardous building material. Attached to this report are the various data tables, survey methodologies and limitations.

Summary of Findings

Building 8 is a single story metal building with limited interior finishes. Sampling of the various suspect material observed was performed and asbestos was not detected.

Although accessible ACBM was not identified, notification to the State and EPA is still required prior to demolition pursuant to NH Administrative Rule Env-A 1800. In addition, as the building was in current use at the time of the survey, destructive survey methods were not employed. Further inspection is needed during demolition to identify suspect material that may be encountered.

Discussion of Findings

Asbestos is the name for a group of naturally occurring minerals that separate into strong, very fine fibers. The adverse health effects associated with asbestos exposure have been extensively studied for many years. Results of these studies and epidemiological investigations have demonstrated that inhalation of asbestos fibers may lead to increased risk of developing one or more diseases. In all cases, extreme care must be used not to disturb asbestos-containing materials or to create fiber release episodes.

In the accessible locations surveyed, RPF identified eleven (11) homogeneous groups of accessible suspect asbestos-containing building material. Suspect materials were identified based on current industry standards, EPA, and other guideline listings of potential suspect ACBM.

The following is a summary list of the suspect ACBM identified and sampled during this survey:

Gypsum board with joint compound	Interior Door Trim Caulk	Electrical Conduit Caulk
Brown Covebase and adhesive	Duct Vibration Cloth	Suspended Ceiling Tiles
Black Covebase and adhesive	Exterior Trim Caulk	
	Roof Panel Seam LAP caulk	

A total of twenty-four (24) samples were extracted from the different groups of suspect material in accordance with EPA sampling protocols. Asbestos was not detected in the samples collected during this survey. Appendix A includes a list of samples collected and analytical results.

The structure was in current use at the time of the survey and full destructive or exploratory survey methods were not feasible. Limited exploratory survey methods were employed during this survey in an effort to identify possible hidden potentially suspect material. For example, as approved by you isolated enclosed or hidden areas of exterior siding, wall and ceiling space was accessed using hand tools to conduct spot inspections. However, it is possible for buildings of this construction period to contain some inaccessible ACBM within wall, floor and ceiling space. Further inspection should be performed in conjunction with demolition activity by the demolition contractor's OSHA-competent site supervisor. Please also reference the attached methodology and limitations.

Suspect materials encountered at the site subsequent to this survey, which are not included on the enclosed listings of suspect material sampled, should be assumed to be ACBM until proper testing proves otherwise (for example prior to any disturbance due to maintenance, renovation or demolition activity). Please notify RPF in this event to arrange for proper testing and assessments.

Notification to the State and EPA Region 1 is required 10-days prior to the start of asbestos abatement work and demolition, as applicable.

Appropriate notifications and hazard communications should be completed to all employees, contractors and others in accordance with US OSHA regulations and other applicable requirements (i.e., labeling in accordance with 29 CFR Part 1926). In the event that additional suspect material or ACBM is encountered during demolition, ACBM labeling requirements should be addressed in accordance with OSHA, 29 CFR 1926.1101 and licensed firms should be employed to properly design, execute and monitor the abatement process.

Conclusions

Based on the RPF inspection, accessible ACBM was not found. Depending on the extent of planned renovations and demolition, further review and possible testing may be needed. In the event that suspect material is encountered during demolition activity that is not addressed herein, qualified inspection personnel should be brought in to inspect and test the material as necessary.

Documentation of current conditions and in-depth hazard assessments is beyond the scope-of-work for this initial survey. With the exception of the specific testing and analysis detailed herein, no other samples of materials, oil, water, ground water, air, substrate surfaces, or other suspect

hazardous materials were collected in the course of this inspection that supports or denies these conclusions. Subsurface investigation was not performed. No additional services beyond those explicitly stated herein were performed and none should be inferred or implied. The summary and conclusions are based on reasonably ascertainable information as described in this report. RPF Environmental, Inc. makes no guarantees, warranties, or references regarding this property or the condition of the property after the period of this report.

If you would like further assistance at this time, please call our office.

Sincerely,
RPF ENVIRONMENTAL, INC.



Allan D. Mercier
NH Licensed Inspector #AI316

Enclosures:

- Appendix A: Inventory and Analytical Tables
- Appendix B: Example Photographs
- Appendix C: Summary of Methodology and Limitations

156801 073115 Report

APPENDIX A

**STATE OF NH DEPT OF ADJUNCT GENERAL
Center Strafford Facility, Building 8**

**SUMMARY OF BULK MATERIAL SAMPLING AND RESULTS
Polarized Light Microscopy – EPA 600/R-93/116 Method**

Samples Collected: July 31, 2015

Sample ID	Sample Description	Asbestos Content	Other Content
073115HG-1a	Gypsum board and Joint Compound, gray and white, northeast corner of storage room	No Asbestos Detected	10% Cellulose, 3% Fiber Glass 87% Non-fibrous
073115HG-1b	Gypsum board and Joint Compound, gray and white, southeast corner of offices	No Asbestos Detected	10% Cellulose, 3% Fiber Glass 87% Non-fibrous
073115HG-1c	Gypsum board and Joint Compound, gray and white, northwest corner of rest room vestibule	No Asbestos Detected	10% Cellulose, 3% Fiber Glass 87% Non-fibrous
073115HG-1d	Gypsum board and Joint Compound, gray and white, northwest corner of men's rest room	No Asbestos Detected	10% Cellulose, 3% Fiber Glass 87% Non-fibrous
073115HG-1e	Gypsum board and Joint Compound, gray and white, southeast corner of ladies rest room	No Asbestos Detected	10% Cellulose, 3% Fiber Glass 87% Non-fibrous
073115HG-2a-A	Cove Base, black, southeast corner of the storage room	No Asbestos Detected	100% Non-fibrous
073115HG-2a-B	Adhesive, yellow, southeast corner of the storage room	No Asbestos Detected	100% Non-fibrous
073115HG-2b-A	Cove Base, black, ladies rest room, south wall	No Asbestos Detected	100% Non-fibrous
073115HG-2b-B	Adhesive, yellow, ladies rest room, south wall	No Asbestos Detected	100% Non-fibrous
073115HG-3a-A	Cove Base, brown, near the storage rooms entrance to the office	No Asbestos Detected	100% Non-fibrous
073115HG-3a-B	Adhesive, yellow, near the storage rooms entrance to the office	No Asbestos Detected	100% Non-fibrous
073115HG-3b-A	Cove Base, brown, northwest corner of the rest room vestibule	No Asbestos Detected	100% Non-fibrous
073115HG-3b-B	Adhesive, yellow, northwest corner of the rest room vestibule	No Asbestos Detected	100% Non-fibrous
073115HG-4a	Suspended Ceiling Tiles, gray, northeast corner of storage room	No Asbestos Detected	60% Cellulose, 10% Mineral Wool, 25% Perlite, 5% Non-fibrous
073115HG-4b	Suspended Ceiling Tiles, gray, near the storage rooms, northeast corner	No Asbestos Detected	50% Cellulose, 20% Mineral Wool 25% Perlite, 5% Non-fibrous
073115HG-4c	Suspended Ceiling Tiles, gray, ladies rest room, south wall	No Asbestos Detected	60% Cellulose, 10% Mineral Wool, 25% Perlite, 5% Non-fibrous

Notes:

- Trace means less than 1%. SFP Means analysis was terminated because asbestos was detected on a previous homogenous sample during the survey work. Please reference the "HG" group number.
- Please reference the full report for discussions and additional information and limitations pertaining to these results.

**STATE OF NH DEPT OF ADJUNCT GENERAL
Center Strafford Facility, Building 8**

**SUMMARY OF BULK MATERIAL SAMPLING AND RESULTS
Polarized Light Microscopy – EPA 600/R-93/116 Method**

Samples Collected: July 31, 2015

Sample ID	Sample Description	Asbestos Content	Other Content
073115HG-5a	Interior Door Trim Caulk, white, exterior doors, east double doors	No Asbestos Detected	100% Non-fibrous
073115HG-5b	Interior Door Trim Caulk, white, exterior doors, north door	No Asbestos Detected	100% Non-fibrous
073115HG-6	Duct Vibration Cloth, black, vertical duct inside southwest corner of the training room	No Asbestos Detected	40% Synthetic Fibers 60% Non-fibrous
073115HG-7a	Exterior Trim & Wall Panel Caulk, white, east wall, 5 feet south of double doors	No Asbestos Detected	100% Non-fibrous
073115HG-7b	Exterior Trim & Wall Panel Caulk, white, north wall, 2 feet west of north door	No Asbestos Detected	100% Non-fibrous
073115HG-8	Electrical Conduit Caulk, gray, west edge at electrical conduit	No Asbestos Detected	100% Non-fibrous
073115HG-9a	Roof Panel Seam LAP Caulk, yellow, west edge roof	No Asbestos Detected	100% Non-fibrous
073115HG-9b	Roof Panel Seam LAP Caulk, yellow, east edge roof	No Asbestos Detected	100% Non-fibrous

156801

Notes:

- Trace means less than 1%. SFP Means analysis was terminated because asbestos was detected on a previous homogenous sample during the survey work. Please reference the "HG" group number.
- Please reference the full report for discussions and additional information and limitations pertaining to these results.

APPENDIX B



1. Building 8 – metal building – no asbestos detected



2. Metal roof on building – no asbestos detected



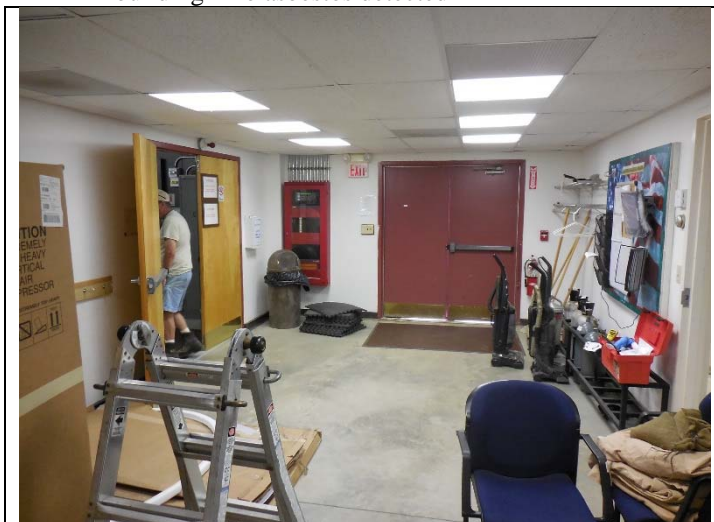
3. Typical interior room – no asbestos detected



4. Typical space above suspended ceiling tiles throughout building – no asbestos detected



5. Typical bathroom in building – no asbestos detected



6. Typical room inside building – no asbestos detected.

APPENDIX B: SITE PHOTOGRAPHS

Site Address:

**Center Strafford Facility
Building 8**



www.airpf.com

603-942-5432

File No. 156801

APPENDIX C

Summary of Methodology: Asbestos-Containing Building Materials Survey

EPA accredited inspector(s) surveyed accessible space in the building or site areas included within the RPF Scope of Work (SOW) to identify suspect asbestos-containing building material (ACBM). Suspect ACBM was inventoried and categorized into homogeneous groups of materials. To the extent indicated in the report, samples were then extracted from the different groups of homogeneous materials in accordance with applicable State and federal rules and regulations. For surveys in which the SOW included full inspections of the affect space, sampling methodologies were based on the requirements set forth in 40 CFR Part 763 (EPA) and 29 CFR Part 1926.1101 (OSHA). For preliminary or limited surveys, findings apply to only the affected material or space as indicated in the RPF SOW and Report and additional inspection and testing will be required to satisfy regulatory obligations associated with renovation, demolition, maintenance and other occupational safety and health requirements.

Collected samples were individually placed into sealed containers, labeled, and submitted with proper chain of custody forms to the RPF NVLAP-accredited vendor laboratory. Sample containers and tools were cleaned after each sample was collected. Samples were analyzed for asbestos content using polarized light microscopy (PLM). Although PLM is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, PLM may not be sensitive enough to detect all of the asbestos fibers in certain types of materials, such as floor tile and other nonfriable ACBM. In the event that more definitive results are requested in cases of with negative or trace results of asbestos are detected, RPF recommends that confirmation testing be completed using transmission electron microscopy.

For each homogeneous group of suspect material, a “stop at first positive” (SFP) method may have been employed during the analysis. The SFP method is based on current EPA sampling protocols and means that if one sample within a homogeneous group of suspect material is found to contain >1% asbestos, then further analysis of that specific homogenous group samples is terminated and the entire homogeneous group of material is considered to be ACBM regardless of the other sample results. This is based on the potential for inconsistent mix of asbestos in the product yielding varying findings across the different individual samples collected from the same homogeneous group. Unless otherwise noted in the report, sample groups found to have 1% to <10% asbestos content are assumed to be ACBM; to rebut this assumption further analysis with point count methods are required.

Inaccessible and hidden areas, including but not limited to wall/floor/ceiling cavity space, space with obstructed access (such as fiberglass insulation above suspended ceilings), sub floors, interiors of mechanical and process equipment, and similar spaces were not included in the inspection and care should be used when accessing these areas in the future. Unless otherwise noted in the RPF Report, destructive survey techniques were not employed during this survey.

In the event that additional suspect materials are encountered that are not addressed in this report, the materials should be properly tested by an accredited inspector. For example, during renovation and demolition it is likely that additional suspect material will be encountered and such suspect materials should be assumed to be hazardous until proper inspection and testing occurs.

RPF followed applicable industry standards; however, various assumptions and limitations of the methods can result in missed materials or misidentification of materials due several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspection, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material. Also reference the Limitations document attached to the report.

LIMITATIONS

1. The observations and conclusions presented in the Report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the RPF Environmental, Inc. Scope of Work (SOW) as discussed in the proposal and/or agreement. The conclusions and recommendations are based on visual observations and testing, limited as indicated in the Report, and were arrived at in accordance with generally accepted standards of industrial hygiene practice and asbestos professionals. The nature of this survey or monitoring service was limited as indicated herein and in the report or letter of findings. Further testing, survey, and analysis is required to provide more definitive results and findings.
2. For site survey work, observations were made of the designated accessible areas of the site as indicated in the Report. While it was the intent of RPF to conduct a survey to the degree indicated, it is important to note that not all suspect ACM material in the designated areas were specifically assessed and visibility was limited, as indicated, due to the presence of furnishings, equipment, solid walls and solid or suspended ceilings throughout the facility and/or other site conditions. Asbestos or hazardous material may have been used and may be present in areas where detection and assessment is difficult until renovation and/or demolition proceeds. Access and observations relating to electrical and mechanical systems within the building were restricted or not feasible to prevent damage to the systems and minimize safety hazards to the survey team.
3. Although assumptions may have been stated regarding the potential presence of inaccessible or concealed asbestos and other hazardous material, full inspection findings for all asbestos and other hazardous material requires the use of full destructive survey methods to identify possible inaccessible suspect material and this level of survey was not included in the SOW for this project. For preliminary survey work, sampling and analysis as applicable was limited and a full survey throughout the site was not performed. Only the specific areas and /or materials indicated in the report were included in the SOW. This inspection did not include a full hazard assessment survey, full testing or bulk material, or testing to determine current dust concentrations of asbestos in and around the building. Inspection results should not be used for compliance with current EPA and State asbestos in renovation/demolition requirements unless specifically stated as intended for this use in the RPF report and considering the limitations as stated therein and within this limitations document.
4. Where access to portions of the surveyed area was unavailable or limited, RPF renders no opinion of the condition and assessment of these areas. The survey results only apply to areas specifically accessed by RPF during the survey. Interiors of mechanical equipment and other building or process equipment may also have asbestos and other hazardous material present and were not included in this inspection. For renovation and demolition work, further inspection by qualified personnel will be required during the course of construction activity to identify suspect material not previously documented at the site or in this survey report. Bordering properties were not investigated and comprehensive file review and research was not performed.
5. For lead in paint, observations were made of the designated accessible areas of the site as indicated in the Report. Limited testing may have been performed to the extent indicated in the text of the report. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing, air monitoring and other related testing throughout the building, should be completed. This type of in depth testing and analysis was beyond the scope of services for the initial inspection. For lead surveys with XRF readings, it is recommended that surfaces found to have LBP or trace amount of lead detected with readings of less than 4 mg/cm² be confirmed using laboratory analysis if more definitive results are required. Substrate corrections involving destructive sampling or damage to existing surfaces (to minimize XRF read-through) were not completed. In some instances, destructive testing may be required for more accurate results. In addition, depending on the specific thickness of the paint films on different areas of a building component, differing amounts of wear, and other factors, XRF readings can vary slightly, even on the same building component. Unless otherwise specifically stated in the scope of services and final report, lead testing performed is not intended to comply with other state and federal regulations pertaining to childhood lead poisoning regulations.

6. Air testing is to be considered a “snap shot” of conditions present on the day of the survey with the understanding that conditions may differ at other times or dates or operational conditions for the facility. Results are also limited based on the specific analytical methods utilized. For phase contrast microscopy (PCM) total airborne fiber testing, more sensitive asbestos-specific analysis using transmission electron microscopy (TEM) can be performed upon request.
7. For asbestos bulk and dust testing, although polarize light microscopy (PLM) is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, some industry studies have found that PLM may not be sensitive enough to detect all of the asbestos fibers in certain nonfriable material, vermiculate type insulation, soils, surface dust, and other materials requiring more sensitive analysis to identify possible asbestos fibers. In the event that more definitive results are requested, RPF recommends that confirmation testing be completed using TEM methods or other analytical methods as may be applicable to the material. Detection of possible asbestos fibers may be made more difficult by the presence of other non-asbestos fibrous components such as cellulose, fiber glass, etc., by binder/matrix materials which may mask or obscure fibrous components, and/or by exposure to conditions capable of altering or transforming asbestos. PLM can show significant bias leading to false negatives and false positives for certain types of materials. PLM is limited by the visibility of the asbestos fibers. In some samples the fibers may be reduced to a diameter so small or masked by coatings to such an extent that they cannot be reliably observed or identified using PLM.
8. For hazardous building material inspection or survey work, RPF followed applicable industry standards; however, RPF does not warrant or certify that all asbestos or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due to several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspect, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material.
9. Full assessments often requires multiple rounds of sampling over a period of time for air, bulk material, surface dust and water. Such comprehensive testing was beyond the scope of RPF services. In addition clearance testing for abatement, as applicable, was based on the visual observations and limited ambient area air testing as indicated in the report and in accordance with applicable state and federal regulations. The potential exists that microscopic surface dust remains with contaminant present even in the event that the clearance testing meets the state and federal requirements. Likewise for building surveys, visual observations are not sufficient alone to detect possible contaminant in settled dust. Unless otherwise specifically indicated in the report, surface dust testing was not included in the scope of the RPF services.
10. For abatement or remediation monitoring services: RPF is not responsible for observations and test for specific periods of work that RPF did not perform full shift monitoring of construction, abatement or remediation activity. In the event that problems occurred or concerns arouse regarding contamination, safety or health hazards during periods RPF was not onsite, RPF is not responsible to provide documentation or assurances regarding conditions, safety, air testing results and other compliance issues. RPF may have provided recommendations to the Client, as needed, pertaining to the Client’s Contractor compliance with the technical specifications, schedules, and other project related issues as agreed and based on results of RPF monitoring work. However, actual enforcement, or waiving of, contract provisions and requirements as well as regulatory liabilities shall be the responsibility of Client and Client’s Contractor(s). Off-site abatement activities, such as waste transportation and disposal, were not monitored or inspected by RPF.

11. For services limited to clearance testing following abatement or remediation work by other parties: The testing was limited to clearance testing only and as indicated in the report and a site assessment for possible environmental health and safety hazards was not performed as part of the scope of this testing. Client, or Client's abatement contractor as applicable, was responsible for performing visual inspections of the work area to determine completeness of work prior to air clearance testing by RPF.
12. For site work, including but not limited to air clearance testing services, in which RPF did not provide full site safety and health oversight, abatement design, full shift monitoring of all site activity, RPF expresses no warranties, guarantees or certifications of the abatement work conducted by the Client or other employers at the job site(s), conditions during the work, or regulatory compliance, with the exception of the specific airborne concentrations as indicated by the air clearance test performed by RPF during the conditions present for the clearance testing. Unless otherwise specifically noted in the RPF Report, visual inspections and air clearance testing results apply only to the specific work area and conditions present during the testing. RPF did not perform visual inspections of surfaces not accessible in the work area due to the presence of containment barriers or other obstructions. In these instances, some contamination may be present following RPF clearance testing and such contamination may be exposed during and after removal of the containment barriers or other obstructions following RPF testing services. Client or Client's Contractor is responsible for using appropriate care and inspection to identify potential hazards and to remediate such hazards as necessary to ensure compliance and a safe environment.
13. The survey was limited to the material and/or areas as specifically designated in the report and a site assessment for other possible environmental health and safety hazards or subsurface pollution was not performed as part of the scope of this site inspection. Typically, hazardous building materials such as asbestos, lead paint, PCBs, mercury, refrigerants, hydraulic fluids and other hazardous product and materials may be present in buildings. The survey performed by RPF only addresses the specific items as indicated in the Report.
14. For mold and moisture survey services, RPF services did not include design or remediation of moisture intrusion. Some level of mold will remain at the site regardless of RPF testing and Contractor or Client cleaning efforts. RPF testing associated with mold remediation and assessments is limited and may or may not be representative of other surfaces and locations at the site. Mold growth will occur if moisture intrusion deficiencies have not been fully remedied and if the site or work areas are not maintained in a sufficiently dry state. Porous surfaces in mold contaminated areas which are not removed and disposed of will likely result in future spore release, allergen sources, or mold contamination.
15. Existing reports, drawings, and analytical results provided by the Client to RPF, as applicable, were not verified and, as such, RPF has relied upon the data provided as indicated, and has not conducted an independent evaluation of the reliability of these data.
16. Where sample analyses were conducted by an outside laboratory, RPF has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.
17. All hazard communication and notification requirements, as required by U.S. OSHA regulation 29 CFR Part 1926, 29 CFR Part 1910, and other applicable rules and regulations, by and between the Client, general contractors, subcontractors, building occupants, employees and other affected persons were the responsibility of the Client and are not part of the RPF SOW.
18. The applicability of the observations and recommendations presented in this report to other portions of the site was not determined. Many accidents, injuries and exposures and environmental conditions are a result of individual employee/employer actions and behaviors, which will vary from day to day, and with operations being conducted. Changes to the site and work conditions that occur subsequent to the RPF inspection may result in conditions which differ from those present during the survey and presented in the findings of the report.

SECTION 074619 - STEEL SIDING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes steel siding.
- B. Related Requirements:
 - 1. Section 061000 "Rough Carpentry" for wood furring, grounds, nailers, and blocking.

1.3 COORDINATION

- A. Coordinate siding installation with flashings and other adjoining construction to ensure proper sequencing.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Samples for Initial Selection: For steel siding including related accessories.

1.6 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of steel siding.
- B. Research/Evaluation Reports: For each type of steel siding required, from ICC-ES.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with labels intact until time of use.
- B. Store materials on elevated platforms, under cover, and in a dry location.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain products, including related accessories, from single source from single manufacturer.

2.2 STEEL SIDING

- A. Steel Siding: Formed product, in continuous lengths without end joints, made from galvanized steel complying with ASTM A 653/A 653M, G90 (Z275) coating.
- B. Vertical Pattern: The intent is to match the adjoining buildings with siding and trim. The siding on the adjacent buildings is a CORL "R" panel. The panel has a 1 ¼" major rib 12" on center and minor ribs 4" on center and panels are 36" wide..
- C. Texture: Smooth.
- D. Nominal Thickness: 0.017 inch (0.43 mm).
- E. Finish: Manufacturer's standard.
 - 1. Colors: As selected by Architect from manufacturer's full range of colors. The intent is to match the color(s) of the adjacent buildings.

2.3 ACCESSORIES

- A. Siding Accessories, General: Provide starter strips, edge trim, outside and inside corner caps, and other items as recommended by siding manufacturer for building configuration.
 - 1. Provide accessories made from same material as and matching color and texture of adjacent siding unless otherwise indicated.
- B. Decorative Accessories: Provide the following steel decorative accessories as indicated:
 - 1. Corner posts.
 - 2. Door and window casings.
- C. Colors for Decorative Accessories: As selected by Architect from manufacturer's full range of colors.
- D. Flashing: Provide flashing complying with Section 076200 "Sheet Metal Flashing and Trim" at window and door heads and where indicated.
- E. Fasteners:
 - 1. For fastening to metal, use ribbed bugle-head screws of sufficient length to penetrate a minimum of 1/4 inch (6 mm), or three screw-threads, into substrate.
 - 2. For fastening galvanized steel, use hot-dip galvanized-steel fasteners. Where fasteners are exposed to view, use prefinished galvanized-steel fasteners in color to match item being fastened.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of steel siding and related accessories.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.

3.3 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.
- B. Install joint sealants as specified in Section 079200 "Joint Sealants" and to produce a weathertight installation.
- C. Where steel siding contacts dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape or installing nonconductive spacers as recommended by manufacturer for this purpose.

3.4 ADJUSTING AND CLEANING

- A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.
- B. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

END OF SECTION 074619

SECTION 105113

METAL LOCKERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Extra wide, standard, double tier athletic lockers.

1.3 ACTION SUBMITTALS

- A. All submittals shall be per section 01 3300 and will be tracked on the project submittal register.
- B. Product Data: For each type of metal locker.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of metal locker and bench.
- C. Shop Drawings: For metal lockers.
 - 1. Include plans, elevations, sections, details, and attachments to other work.
 - 2. Show locker trim and accessories.
 - 3. Include locker identification system and numbering sequence.
- D. Product Schedule: For lockers. Use same designations indicated on Drawings.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Sample Warranty: For special warranty.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For adjusting, repairing, and replacing locker doors and latching mechanisms to include in maintenance manuals.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver metal lockers until spaces to receive them are clean, dry, and ready for their installation.

- B. Deliver master and control keys to Contracting Officer by registered mail or overnight package service.

1.7 FIELD CONDITIONS

- A. Field Measurements: Verify actual dimensions of recessed openings by field measurements before fabrication.

1.8 COORDINATION

- A. Coordinate sizes and locations of wood bases for metal lockers.
- B. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of work specified in other Sections to ensure that metal lockers can be supported and installed as indicated.

1.9 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of metal lockers that fail in materials or workmanship, excluding finish, within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures.
 - b. Faulty operation of latches and other door hardware.
 - 2. Damage from deliberate destruction and vandalism is excluded.
 - 3. Warranty Period for Knocked-Down Metal Lockers: Two years from date of Substantial Completion.
 - 4. Warranty Period for Welded Metal Lockers: Lifetime from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain metal lockers and accessories from single source from single locker manufacturer.
 - 1. Obtain locks from single lock manufacturer.

2.2 PERFORMANCE REQUIREMENTS

- A. Accessibility Requirements: For lockers indicated to be accessible, comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines.

2.3 WELDED, CLOSED-FRONT ATHLETIC LOCKERS

- A. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

1. Salsbury Industries, 52000 Series, 15" deep
- B. Locker Arrangement: Closed front, with upper shelf.
- C. Material: Cold-rolled steel sheet, 16 gauge.
- D. Body: Assembled by welding body components together. Fabricate from unperforated steel sheet with thicknesses as follows:
 1. Tops and Bottoms: 0.060-inch (1.52-mm) nominal thickness, with single bend at edges.
 2. Backs: 0.048-inch (1.21-mm) nominal thickness.
 3. Shelves: 0.060-inch (1.52-mm) nominal thickness, with double bend at front and single bend at sides and back.
- E. Expanded-Metal Sides: Fabricated from 0.090-inch (2.28-mm) nominal-thickness expanded metal; welded to 0.105-inch (2.66-mm) nominal-thickness steel angles or 0.060-inch (1.52-mm) nominal-thickness steel channel frames.
- F. Frames: Channel formed; fabricated from 0.060-inch (1.52-mm) nominal-thickness steel sheet or 0.105-inch (2.66-mm) nominal-thickness steel angles; lapped and factory welded at corners; with top and bottom main frames factory welded into vertical main frames.
- G. Reinforced Bottoms: Structural channels, formed from 0.075-inch (1.90-mm) nominal-thickness steel sheet; welded to front and rear of side-panel frames.
- H. Identification Plates: Manufacturer's standard, etched, embossed, or stamped aluminum plates, with numbers and letters at least 3/8 inch (9 mm) high.
- I. Hooks: Manufacturer's standard ball-pointed type, aluminum or steel; zinc plated.
- J. Continuous Sloping Tops: Fabricated from 0.048-inch (1.21-mm) nominal-thickness steel sheet, with a pitch of approximately 20 degrees.
 1. Closures: Vertical end type.
- K. Filler Panels: Fabricated from 0.048-inch (1.21-mm) nominal-thickness steel sheet.
- L. Boxed End Panels: Fabricated from 0.060-inch (1.52-mm) nominal-thickness steel sheet.
- M. Materials:
 1. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B, suitable for exposed applications.
 2. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with A60 (ZF180) zinc-iron, alloy (galvannealed) coating designation.
- N. Finish: Baked enamel or powder coat.
 1. Color: As selected by Contracting Officer from manufacturer's full range.

2.4 FABRICATION

- A. Fabricate metal lockers square, rigid, without warp, and with metal faces flat and free of dents or distortion. Make exposed metal edges safe to touch and free of sharp edges and burrs.
 - 1. Form body panels, doors, shelves, and accessories from one-piece steel sheet unless otherwise indicated.
 - 2. Provide fasteners, filler plates, supports, clips, and closures as required for complete installation.
- B. Fabricate each metal locker with an individual door and frame; individual top, bottom, and back; and common intermediate uprights separating compartments. Factory weld frame members of each metal locker together to form a rigid, one-piece assembly.
- C. Equipment: Provide each locker with an identification plate and the following equipment:
 - 1. Double-Tier Units: One double-prong ceiling hook and two single-prong wall hooks.
 - 2. Open-Front Athletic Lockers: Two single-prong wall hooks bolted to locker back and coat rod.
- D. Welded Construction: Factory preassemble metal lockers by welding all joints, seams, and connections; with no bolts, nuts, screws, or rivets used in assembly of main locker groups. Factory weld main locker groups into one-piece structures. Grind exposed welds flush.
- E. Accessible Lockers: Fabricate as follows:
 - 1. Locate bottom shelf no lower than 15 inches (381 mm) above the floor.
 - 2. Where hooks, coat rods, or additional shelves are provided, locate no higher than 48 inches (1219 mm) above the floor.
- F. Continuous Base: Formed into channel or zee profile for stiffness, and fabricated in lengths as long as practical to enclose base and base ends of metal lockers; finished to match lockers.
- G. Continuous Sloping Tops: Fabricated in lengths as long as practical, without visible fasteners at splice locations; finished to match lockers.
 - 1. Sloping-top corner fillers, mitered.
- H. Filler Panels: Fabricated in an unequal leg angle shape; finished to match lockers. Provide slip-joint filler angle formed to receive filler panel.
- I. Boxed End Panels: Fabricated with 1-inch (25-mm-) wide edge dimension, and designed for concealing fasteners and holes at exposed ends of nonrecessed metal lockers; finished to match lockers.
 - 1. Provide one-piece panels for double-row (back-to-back) locker ends.

2.5 ACCESSORIES

- A. Fasteners: Zinc- or nickel-plated steel, slotless-type, exposed bolt heads; with self-locking nuts or lock washers for nuts on moving parts.
- B. Anchors: Material, type, and size required for secure anchorage to each substrate.
 - 1. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls, and elsewhere as indicated, for corrosion resistance.
 - 2. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine walls, floors, and support bases, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Install lockers level, plumb, and true; shim as required, using concealed shims.
 - 1. Anchor locker runs at ends and at intervals recommended by manufacturer, but not more than 36 inches (910 mm) o.c. Using concealed fasteners, install anchors through backup reinforcing plates, channels, or blocking as required to prevent metal distortion.
 - 2. Anchor single rows of metal lockers to walls near top and bottom of lockers
 - 3. Anchor back-to-back metal lockers to floor.
- B. Welded Lockers: Connect groups together with standard fasteners, with no exposed fasteners on face frames.
- C. Equipment:
 - 1. Attach hooks with at least two fasteners.
 - 2. Attach door locks on doors using security-type fasteners.
 - 3. Identification Plates: Identify metal lockers with identification indicated on Drawings.
 - a. Attach plates to each locker door, near top, centered, with at least two aluminum rivets.
 - b. Attach plates to upper shelf of each open-front metal locker, centered, with a least two aluminum rivets.

- D. Trim: Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
 - 1. Attach recess trim to recessed metal lockers with concealed clips.
 - 2. Attach filler panels with concealed fasteners. Locate filler panels where indicated on Drawings.
 - 3. Attach sloping-top units to metal lockers, with closures at exposed ends.
 - 4. Attach boxed end panels using concealed fasteners to conceal exposed ends of nonrecessed metal lockers.
 - 5. Attach finished end panels using fasteners only at perimeter to conceal exposed ends of nonrecessed metal lockers.
- E. Freestanding Locker Benches: Place benches in locations indicated on Drawings.

3.3 ADJUSTING

- A. Clean, lubricate, and adjust hardware. Adjust doors and latches to operate easily without binding. Verify that integral locking devices operate properly.

3.4 PROTECTION

- A. Protect metal lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit use during construction.
- B. Touch up marred finishes, or replace metal lockers that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.

END OF SECTION 105113